100

PHYSICAL ZONE	START CYLINDER	HEAD 0 SECS/TRK	HEAD 1 SECS/TRK
0	0	12	12
1	4	10	10

Fig.1 (Prior Art)

200

LOGICAL ZONE	START LBA	START CYLINDER	HEAD 0 SECS/TRK	HEAD 1 SECS/TRK
0	0	0	11	11
1	88	4	9	9

Fig.2 (Prior Art)

300

INDEX	DEFECT			SPAN	REASSIGNED TO CYL/HEAD/SECT
	HEAD	CYL	SECT		
0	0	3	2	1	
1	0	3	9	1	3/1/11
2	0	4	5	1	
3	0	5	1	1	
4	0	5	3	1	5/1/9
5	0	5	5	1	6/0/9
6	1	0	8	1	
7	1	1	6	1	
8	1	2	8	1	
9	1	6	6	1	

Fig.3 (Prior Art)

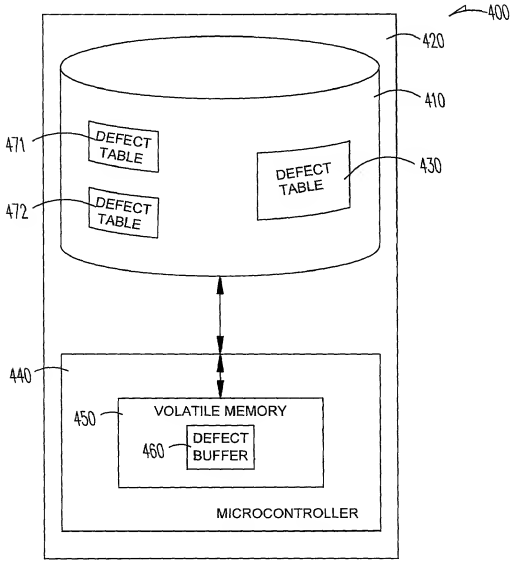
400
420
410
471
DEFECT TABLE
472
DEFECT TABLE
430
DEFECT TABLE
440
450
VOLATILE MEMORY
460
DEFECT BUFFER
MICROCONTROLLER

Fig.4

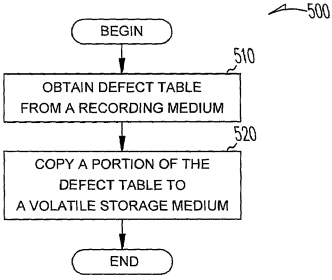
500
BEGIN
510
OBTAIN DEFECT TABLE FROM A RECORDING MEDIUM
520
COPY A PORTION OF THE DEFECT TABLE TO A VOLATILE STORAGE MEDIUM
END

Fig.5

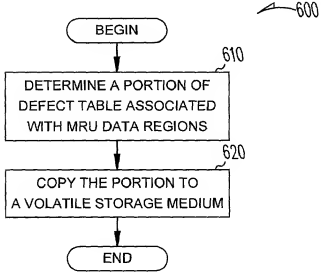
600
BEGIN
610
DETERMINE A PORTION OF DEFECT TABLE ASSOCIATED WITH MRU DATA REGIONS
620
COPY THE PORTION TO A VOLATILE STORAGE MEDIUM
END

Fig.6

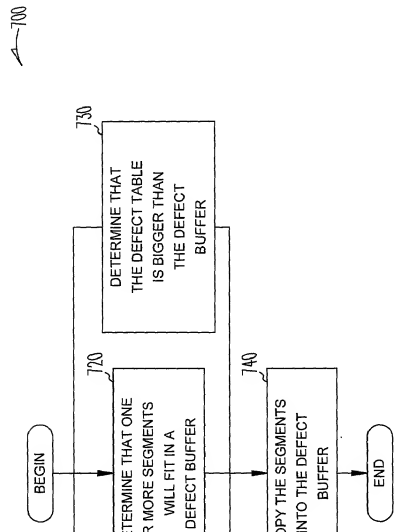
700
BEGIN
710
DETERMINE THAT THE DEFECT TABLE IS PARTITIONED INTO SEGMENTS
720
DETERMINE THAT ONE OR MORE SEGMENTS WILL FIT IN A DEFECT BUFFER
730
DETERMINE THAT THE DEFECT TABLE IS BIGGER THAN THE DEFECT BUFFER
740
COPY THE SEGMENTS INTO THE DEFECT BUFFER
END

Fig.7

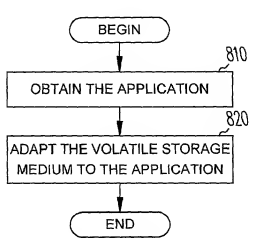
800
BEGIN
810
OBTAIN THE APPLICATION
820
ADAPT THE VOLATILE STORAGE MEDIUM TO THE APPLICATION
END

Fig.8

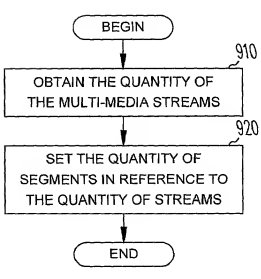
900
BEGIN
910
OBTAIN THE QUANTITY OF THE MULTI-MEDIA STREAMS
920
SET THE QUANTITY OF SEGMENTS IN REFERENCE TO THE QUANTITY OF STREAMS
END

Fig.9

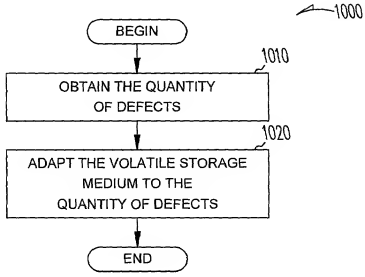
1000
BEGIN
1010
OBTAIN THE QUANTITY OF DEFECTS
1020
ADAPT THE VOLATILE STORAGE MEDIUM TO THE QUANTITY OF DEFECTS
END

Fig.10

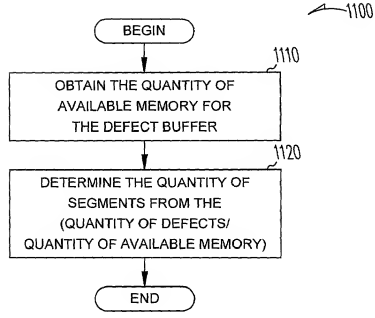
1100
BEGIN
1110
OBTAIN THE QUANTITY OF AVAILABLE MEMORY FOR THE DEFECT BUFFER
1120
DETERMINE THE QUANTITY OF SEGMENTS FROM THE (QUANTITY OF DEFECTS/ QUANTITY OF AVAILABLE MEMORY)
END

Fig.11

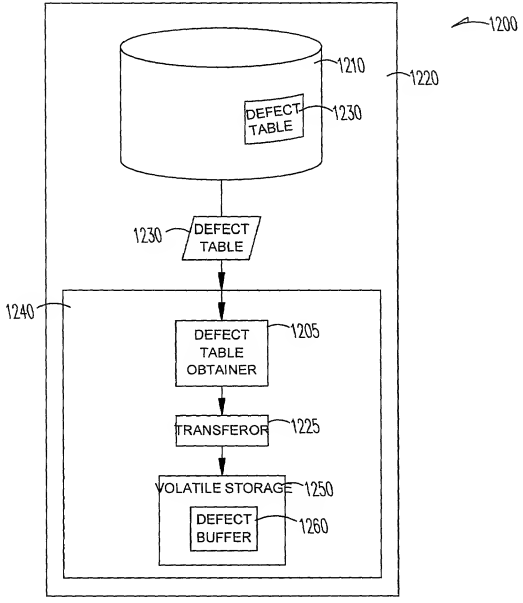
1200
1210
1220
DEFECT TABLE
1230
1230
DEFECT TABLE
1240
DEFECT TABLE OBTAINER
1205
TRANSFEROR
1225
VOLATILE STORAGE
1250
DEFECT BUFFER
1260

Fig.12

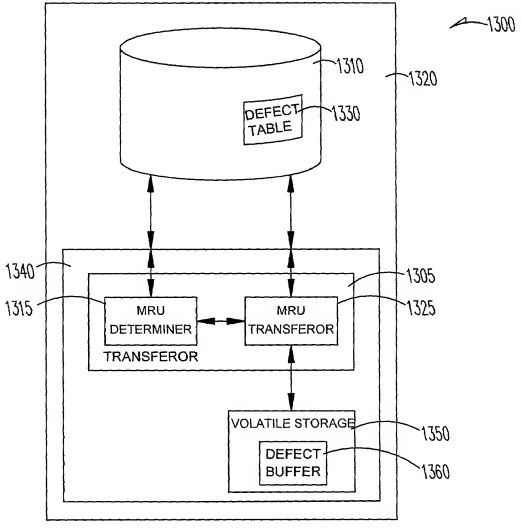
1300
1310
1320
DEFECT TABLE
1330
1340
1315
MRU DETERMINER
MRU TRANSFEROR
1305
1325
TRANSFEROR
VOLATILE STORAGE
1350
DEFECT BUFFER
1360

Fig.13

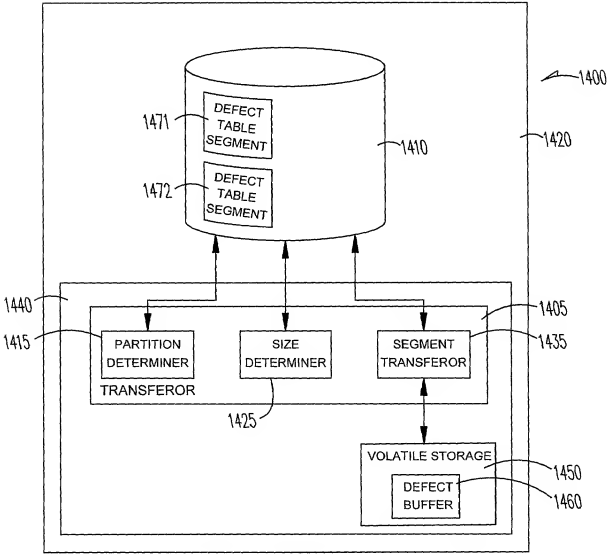
1400
1471
DEFECT TABLE SEGMENT
1472
DEFECT TABLE SEGMENT
1410
1420
1440
1405
1415
PARTITION DETERMINER
SIZE DETERMINER
SEGMENT TRANSFEROR
1435
TRANSFEROR
1425
VOLATILE STORAGE
1450
DEFECT BUFFER
1460

Fig.14

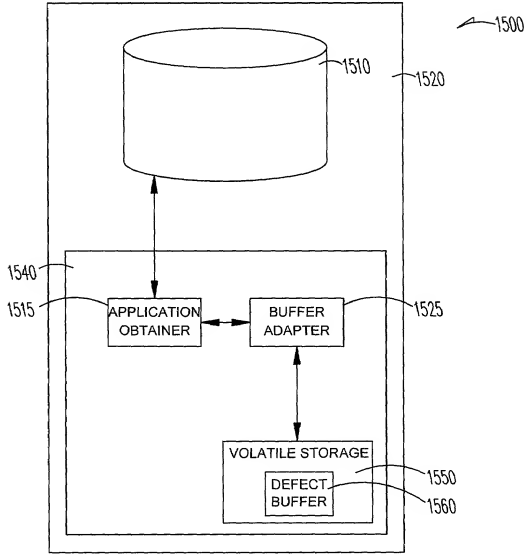
1500
1510
1520
1540
1515
APPLICATION OBTAINER
BUFFER ADAPTER
1525
VOLATILE STORAGE
DEFECT BUFFER
1550
1560

Fig.15

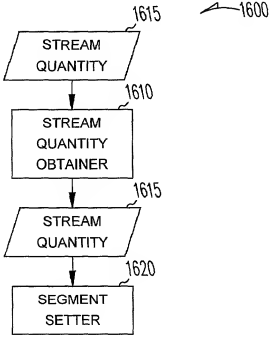
1600
1615
STREAM QUANTITY
1610
STREAM QUANTITY OBTAINER
1615
STREAM QUANTITY
1620
SEGMENT SETTER

Fig.16

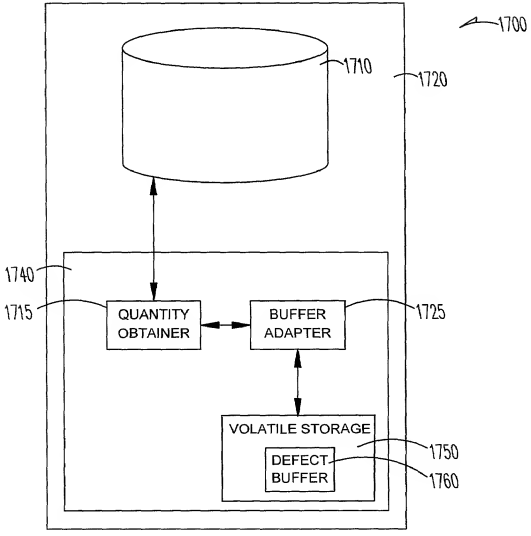
1700
1710
1720
1740
1715
QUANTITY OBTAINER
BUFFER ADAPTER
1725
VOLATILE STORAGE
DEFECT BUFFER
1750
1760

Fig.17

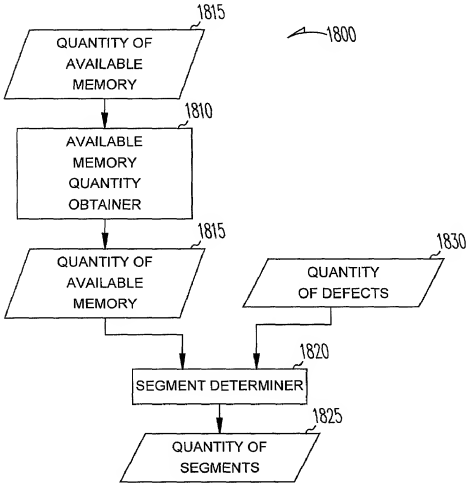
1815
QUANTITY OF AVAILABLE MEMORY
1800
1810
AVAILABLE MEMORY QUANTITY OBTAINER
1815
QUANTITY OF AVAILABLE MEMORY
1830
QUANTITY OF DEFECTS
1820
SEGMENT DETERMINER
1825
QUANTITY OF SEGMENTS

Fig.18

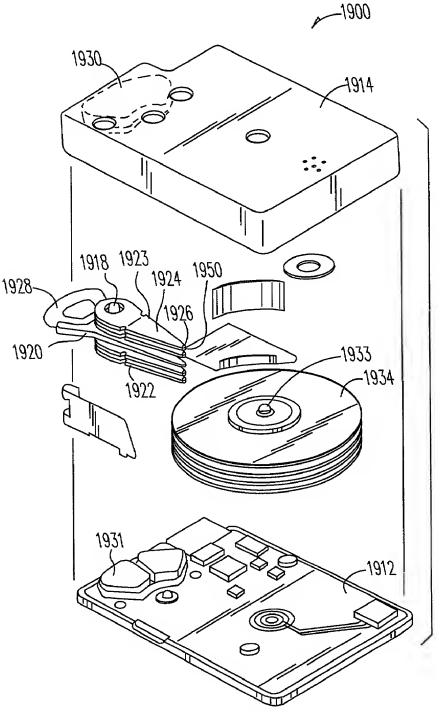
1900
1930
1914
1918
1923
1924
1950
1928
1926
1920
1933
1934
1922
1931
1912

Fig.19

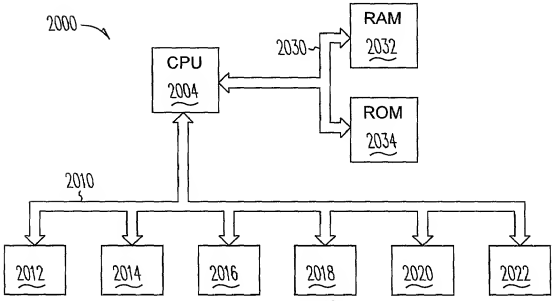
2000
CPU
2004
2030
RAM
2032
ROM
2034
2010
2012
2014
2016
2018
2020
2022

Fig.20